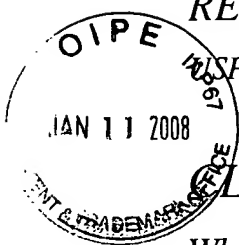


RESPONSE 11th January 2008 to Office Communication mailed 13th July 2007

EUSPTO Application 08 / 477 703 Mitja Hinderks 310 208 6606



CLEAN CLAIMS

What is CLAIMED is:

(1 -197) Claims 1 to 197 are cancelled or renumbered, as noted in the Supplemental Amendment of 25th May 2006.

- 198 A device for the working of fluids, said device substantially defined by a casing having an exterior surface, said casing at least partly supporting and enclosing a cylinder assembly comprising a cylinder with two heads or ends and at least one internal circumferential depression, said assembly containing a component with at least one external circumferential projection, said projection reciprocable in said depression, said cylinder heads and said component having working surfaces partly defining at least one pair of toroidal fluid working chambers which in operation have cyclically variable capacity, said casing including insulating material for the purpose of restricting heat transfer from said assembly.
- 199 The device of claim 198, including means to mount said cylinder assembly in said casing to enable said cylinder assembly to rotate while said component is reciprocating in said cylinder assembly.
- 200 The device of claim 198, including means between said assembly and said component so as to cause said component to rotate relative to said assembly while reciprocating in said assembly.
- 201 The device of claim 198, wherein at least one of said cylinder assembly and said component is at least partly composed of ceramic material.
- 202 The device of claim 198, including at least one fastener, wherein at least one of said component and said cylinder assembly includes a multiplicity of elements held in assembled condition by said fastener loaded under tension.
- 203 Cancelled

- 204 *The device of claim 198, wherein said assembly comprises at least one pair of substantially identical components arranged in mirror image about one another.*

- 205 *The device of claim 198, wherein said component defines a passage for fluids worked by said device.*

- 206 *The device of claim 198, including cylinder assembly surfaces and component surfaces at least partly defining said working chambers, at least one of said surfaces having at least one relatively small deliberately manufactured depression, said depression wholly fillable by fluids worked by said device.*

- 207 *The device of claim 198, including structure located at least in part outside said cylinder assembly and within said surface, said structure at least partly defining at least one volume for passage of fluids to or from at least one of said working chambers, said volume being adjacent to and at least partly surrounding portion of said cylinder assembly.*

- 208 *The device of claim 198, wherein said device is a reciprocating internal combustion engine and said working chambers are combustion chambers, said engine having a charge gas supply system, a fuel delivery apparatus and an emission control system for hot exhaust gas emitted from said engine when operative.*

- 209 *The device of claim 200, wherein said means comprise a guide and an endless track, said guide movable in said endless track, said track having a multiple wave-form configuration.*

- 210 *The device of claim 200, wherein said means comprise said component and said cylinder assembly defining complementary surfaces at least partly of an endless wave-like configuration.*

- 211 *The device of claim 200, including a rotatable shaft and a load transfer mechanism between said shaft and said rotatable and reciprocable component, wherein said mechanism comprises a hollow shaft with interior splines slidable on a shaft with external splines.*

- 212 *The device of claim 200, including a rotatable shaft and a load transfer mechanism between said shaft and said component, wherein said mechanism includes a bellows device.*

- 213 *The device of claim 200, including a rotatable shaft and a load transfer mechanism between said shaft and said component, wherein said mechanism includes at least one hinged element.*

- 214 *The device of claim 200, including a rotatable shaft and a load transfer mechanism between said shaft and said component, wherein said mechanism includes at least one pair of substantially parallel flanges separated by at least one roller, the flanges in operation moving laterally relatively to one another.*

- 215 *The device of claim 201, including at least one electrical circuit within said ceramic material.*

- 216 *The device of claim 202, wherein said fastener is of tubular form.*

- 217 *Cancelled*

- 218 *The device of claim 204, including at least one port located in said cylinder assembly for passage of fluid to or from said working chambers, wherein said port is positioned between said pair of components.*

- 219 *The device of claim 207, wherein said structure is at least partly of insulating material for the purpose of restricting heat transfer from said volume.*

- 220 *The device of claim 209, wherein said guide is disengagable from said track during operation of said device.*

- 221 *A device for the working of fluids, said device having an operating cycle and being substantially defined by a casing having an exterior surface, said casing at least partly supporting and enclosing a cylinder assembly, said assembly having a cylinder portion and at least one cylinder head portion and a component reciprocally movable within said assembly, said head portion and said component partly defining a cyclically variable working chamber therebetween, said component having an internal passage for transfer of fluids to or from said working chamber, said head portion being separated from and pierced by said passage during at least part of said cycle, said casing including insulating material for the purpose of restricting heat transfer from said assembly, said device having no purposely designed means for transferring heat from said assembly, such means including fluid circulating in a jacket adjacent to said assembly or cooling fins radiating from said assembly.*

- 222 *The device of claim 221, including means to mount said cylinder assembly in said casing to enable said cylinder assembly to rotate while said component is reciprocating in said cylinder assembly.*
- 223 *The device of claim 221, including means between said cylinder assembly and said component so as to cause said component to rotate relative to said cylinder while reciprocating in said cylinder assembly.*
- 224 *The device of claim 221, wherein at least one of said component and said cylinder assembly is substantially made of ceramic material.*
- 225 *Cancelled*
- 226 *The device of claim 221, including at least one fastener, wherein at least one of said component and said cylinder assembly includes a multiplicity of elements held in assembled condition by said at least one fastener loaded under tension.*
- 227 *Cancelled*
- 228 *The device of claim 221, wherein said assembly comprises at least one pair of substantially identical components arranged in mirror image about one another.*
- 229 *The device of claim 221, including cylinder assembly surfaces and component surfaces at least partly defining said working chambers, at least one of said surfaces having at least one relatively small deliberately manufactured depression, said depression wholly fillable by fluids worked by said device.*
- 230 *The device of claim 221, including structure located at least in part outside said cylinder assembly and within said exterior surface, said structure at least partly defining at least one volume for passage of fluids to or from said working chamber, said volume being adjacent to and at least partly surrounding portion of said cylinder assembly.*
- 231 *The device of claim 221, wherein said device is a reciprocating internal combustion engine and said working chamber is a combustion chamber, said engine having a charge gas supply system, a fuel delivery apparatus and an emission control system for hot exhaust gas emitted*

from said engine when operative.

- 232 *The device of claim 223, wherein said means comprise a guide and an endless track, said guide movable in said endless track, said track having a multiple wave-form configuration.*
- 233 *The device of claim 223, wherein said means comprise said component and said cylinder assembly define complementary surfaces at least partly of an endless wave-like configuration.*
- 234 *The device of claim 223, including a rotatable shaft and a load transfer mechanism between said shaft and said rotatable and reciprocable component,, wherein said mechanism comprises a hollow shaft with interior splines slidable on a shaft with external splines.*
- 235 *The device of claim 224, including at least one electrical circuit within said ceramic material.*
- 236 *Cancelled*
- 237 *The device of claim 226, wherein said fastener is of tubular form.*
- 238 *Cancelled*
- 239 *The device of claim 228, including at least one port located in said cylinder assembly for passage of fluid to or from said working chamber, wherein said port is positioned between said pair of components.*
- 240 *The device of claim 230, wherein said structure is at least partly of insulating material for the purpose of restricting heat transfer from said volume.*
- 241 *The device of claim 232, wherein said guide is disengagable from said track during operation of said device.*
- 242 *A device for the working of fluids comprising at least one cylinder assembly containing a component reciprocable therein, said component having two longitudinal extremities and at least one circumferential projection, said cylinder assembly having at least one internal circumferential depression in which said projection is positioned to reciprocate, said projection and depression forming a pair of toroidal fluid working chambers of cyclically*

variable capacity, said component having at least one internal passage for movement of fluids to or from said working chambers, said assembly including a multiplicity of elements of ceramic material held in assembled and abutted condition by at least one fastener loaded in tension, said device having no purposely designed means for transferring heat from said assembly, such means including fluid circulating in a jacket adjacent to said assembly or cooling fins radiating from said assembly.

- 243 *The device of claim 242, including a casing in which said cylinder assembly is mounted.*
- 244 *The device of claim 242, including means between said assembly and said component so as to cause said component to rotate relative to said assembly while reciprocating in said assembly.*
- 245 *The device of claim 242, including a crankshaft and a connecting rod, to which crankshaft an extremity is linked by said connecting rod.*
- 246 *The device of claim 242, wherein at least one of said extremities in normal operation transfers loads associated with said working chambers, said loads in operation being principally in tension.*
- 247 *The device of claim 242, wherein said component is at least partly composed of ceramic material.*
- 248 *The device of claim 242, wherein said assembly comprises at least one pair of substantially identical components arranged in mirror image about one another.*
- 249 *The device of claim 242, including at least one second fastener, said reciprocatable component comprising a multiplicity of elements, said elements being held in assembled condition by said second fastener loaded in tension.*
- 250 *The device of claim 242, including filamentary material contained in said internal passage.*
- 251 *The device of claim 242, wherein at least one of said cylinder assembly and said component has at least one surface at least partly defining at least one of said working chambers, said surface having at least one relatively small manufactured depression wholly fillable by fluids*

worked by said device.

252 *Cancelled*

253 *The device of claim 242, wherein said fastener is of tubular form.*

254 *The device of claim 242, including at least one electrical circuit within said ceramic material.*

255 *The device of claim 244, including a rotatable shaft and a load transfer mechanism, said component being linked to said rotatable shaft by said load transfer mechanism.*

256 *The device of claim 242, including structure located at least in part outside and in proximity to said cylinder assembly, said structure at least partly defining at least one volume for passage of fluids to or from at least one of said working chambers, said volume being adjacent to and at least partly surrounding portion of said cylinder assembly.*

257 *The device of claim 242, wherein said device is a reciprocating internal combustion engine and said working chambers are combustion chambers, said engine having a charge gas supply system, a fuel delivery apparatus and an emission control system for hot exhaust gas emitted from said engine when operative.*

258 *The device of claim 243, wherein said casing is at least partially composed of thermally insulating material.*

259 *The device of claim 243, including means to mount said cylinder assembly in said casing to enable said cylinder assembly to rotate while said component is reciprocating in said cylinder assembly.*

260 *The device of claim 244, wherein said means comprise a guide and an endless track, said guide movable in said endless track, said track having a multiple wave form configuration.*

261 *The device of claim 244, wherein said means comprise said component and said cylinder assembly define complementary surfaces at least partly of endless wave-like configurations.*

262 *The device of claim 247, including at least one electrical circuit within said ceramic material.*

- 263 *The device of claim 248, wherein said pair of components define a port therebetween for passage of fluid to or from said working chambers.*

- 264 *The device of claim 249, wherein said second fastener is of tubular form.*

- 265 *The device of claim 250, wherein said filamentary material includes substance having catalytic effect to hasten chemical reaction in said working fluid.*

- 266 *The device of claim 255, wherein said mechanism comprises a hollow shaft with interior splines slidable on a shaft with external splines.*

- 267 *The device of claim 255, wherein said mechanism comprises a bellows device.*

- 268 *The device of claim 255, wherein said mechanism includes at least one hinged element.*

- 269 *The device of claim 255, wherein said mechanism includes at least one pair of substantially parallel flanges separated by at least one roller, the flanges in operation moving laterally relatively to one another.*

- 270 *The device of claim 256, including filamentary material contained in said volume.*

- 271 *The device of claim 257, wherein said device is part of a compound engine including said internal combustion engine and a second engine.*

- 272 *The device of claim 260, wherein said guide is disengagable from said track.*

- 273 *The device of claim 270, wherein said filamentary material includes substance having catalytic effect to hasten chemical reaction in said working fluid.*

- 274 *The device of claim 271, wherein said second engine is a turbine engine, in operation said hot exhaust gas being used to power said turbine engine.*

- 275 *The device of claim 271, wherein said second engine is a steam engine, in operation energy from said hot exhaust gas being used to power said steam engine.*

- 276 *The device of claim 271, wherein said second engine is a Stirling engine, in operation energy from said hot exhaust gas being used to power said Stirling engine.*
- 277 *A device for the working of fluids defined by an exterior surface, said device including a structure and a cylinder assembly having at least one internal circumferential depression all substantially located within said surface, said assembly containing a component having two cylindrical ends each with at least one opening, said component having at least one circumferential external projection reciprocable in said depression, in operation said projection and depression forming at least one pair of toroidal fluid working chambers of cyclically variable capacity, said component having at least one internal passage communicating with said openings for transfer of fluids to or from said working chambers, said structure being in proximity to and at least partially surrounding portion of said cylinder assembly and including insulating material to restrict heat transfer from said assembly.*
- 278 *The device of claim 277, including a casing, wherein said exterior surface is substantially that of said casing.*
- 279 *The device of claim 277, including means between said assembly and said component so as to cause said component to rotate relative to said assembly while reciprocating in said assembly.*
- 280 *The device of claim 277, wherein at least one of said cylinder assembly and said component is at least partly composed of ceramic material.*
- 281 *The device of claim 277, including at least one fastener, wherein at least one of said component and said cylinder assembly includes a multiplicity of elements held in assembled condition by said at least one fastener loaded under tension.*
- 282 *Cancelled*
- 283 *The device of claim 277, wherein said assembly comprises at least one pair of substantially identical components arranged in mirror image about one another.*
- 284 *The device of claim 277, including cylinder assembly surfaces and component surfaces at least partly defining said working chambers, at least one of said surfaces having at least one*

relatively small deliberately manufactured depression, said depression wholly fillable by fluids worked by said device.

285 *The device of claim 277, including at least one volume for passage of fluids to or from at least one of said working chambers, said volume being located substantially between said structure and said cylinder assembly, said volume being adjacent to and at least partly surrounding portion of said cylinder assembly.*

286 *The device of claim 277, wherein said device is a reciprocating internal combustion engine and said working chambers are combustion chambers, said engine having a charge gas supply system, a fuel delivery apparatus and an emission control system for hot exhaust gas emitted from said engine when operative.*

287 *The device of claim 278, including means to mount said cylinder assembly in said casing to enable said cylinder assembly to rotate while said component is reciprocating in said cylinder assembly.*

288 *The device of claim 278, wherein said casing is at least partially composed of thermally insulating material.*

289 *The device of claim 279, wherein said means comprise a guide and an endless track, said guide movable in said endless track, said track having a multiple wave form configuration.*

290 *The device of claim 279, wherein said means comprise said component and said cylinder assembly define complementary surfaces at least partly of endless wave-like configurations.*

291 *The device of claim 279, including a rotatable shaft and a load transfer mechanism between said shaft and said rotatable and reciprocable component, wherein said mechanism comprises a hollow shaft with interior splines slidable on a shaft with external splines.*

292 *The device of claim 280, including at least one electrical circuit within said ceramic material.*

293 *The device of claim 281, wherein said fastener is of tubular form.*

294 *Cancelled*

- 295 *The device of claim 283, including at least one port located in said cylinder assembly for passage of fluid to or from said working chambers, wherein said port is positioned between said pair of components.*

- 296 *The device of claim 289, wherein said guide is disengagable from said track during operation of said device.*

- 297 *A device for the working of fluids, said device having a cylinder assembly comprising a cylinder with at least one internal circumferential depression, said assembly containing a component with at least one external circumferential projection, said external circumferential projection reciprocating in said circumferential depression and both having working surfaces defining at least one pair of toroidal fluid working chambers which in operation have cyclically variable capacity, said assembly including a multiplicity of elements of ceramic material held in assembled and abutted condition by at least one fastener loaded in tension.*

- 298 *The device of claim 297, including a casing, wherein said casing at least partly encloses said cylinder assembly.*

- 299 *The device of claim 297, including means between said assembly and said component so as to cause said component to rotate relative to said assembly while reciprocating in said assembly, wherein said device is an internal combustion engine and at least one of said fluid working chambers functions as a combustion chamber, said engine having no purposely designed means for transferring heat from said combustion chamber, such means including fluid circulating in a jacket adjacent to said assembly or cooling fins radiating from said assembly.*

- 300 *The device of claim 297, wherein said component is at least partly composed of ceramic material.*

- 301 *The device of claim 297, including at least one second fastener, said reciprocatable component comprising a multiplicity of elements, said elements being held in assembled condition by said fastener loaded in tension.*

- 302 *The device of claim 297, wherein said assembly comprises at least one pair of substantially identical components arranged in mirror image about one another.*

- 303 *The device of claim 297, wherein said component defines a passage for fluids worked by said device.*
- 304 *The device of claim 297, including cylinder assembly surfaces and component surfaces at least partly defining said working chambers, at least one of said surfaces having at least one relatively small manufactured depression, said depression wholly fillable by fluids worked by said device.*
- 305 *The device of claim 297, wherein said fastener is of tubular form.*
- 306 *The device of claim 297, including at least one electrical circuit within said ceramic material.*
- 307 *The device of claim 297, including structure located at least in part outside said cylinder assembly, said structure at least partly defining at least one volume for passage of fluids to or from at least one of said working chambers, said volume being adjacent to and at least partly surrounding portion of said cylinder assembly.*
- 308 *The device of claim 297, wherein said device is a reciprocating internal combustion engine and said working chambers are combustion chambers, said engine having a charge gas supply system, a fuel delivery apparatus and an emission control system for hot exhaust gas emitted from said engine when operative.*
- 309 *The device of claim 298, including means to mount said cylinder assembly in said casing to enable said cylinder assembly to rotate while said component is reciprocating in said cylinder assembly.*
- 310 *The device of claim 298, wherein said casing is at least partially composed of thermally insulating material.*
- 311 *(Original) The device of claim 299, wherein said means comprise a guide and an endless track, said guide movable in said endless track, said track having a multiple wave-form configuration.*
- 312 *The device of claim 299, wherein said means comprise said component and said cylinder assembly define complementary surfaces at least partly of an endless wave-like configuration.*

- 313 *The device of claim 299, including a rotatable shaft and a load transfer mechanism between said shaft and said rotatable and reciprocable component, wherein said mechanism comprises a hollow shaft with interior splines slidable on a shaft with external splines.*
- 314 *The device of claim 299, including a rotatable shaft and a load transfer mechanism between said shaft and said component, wherein said mechanism includes a bellows device.*
- 315 *The device of claim 299, including a rotatable shaft and a load transfer mechanism between said shaft and said component, wherein said mechanism includes at least one hinged element.*
- 316 *The device of claim 299, including a rotatable shaft and a load transfer mechanism between said shaft and said component, wherein said mechanism includes at least one pair of substantially parallel flanges separated by at least one roller, the flanges in operation moving laterally relatively to one another.*
- 317 *The device of claim 300, including at least one electrical circuit within said ceramic material.*
- 318 *The device of claim 301, wherein said second fastener is of tubular form.*
- 319 *The device of claim 302, including at least one port located in said cylinder assembly for passage of fluid to or from said working chambers, wherein said port is positioned between said pair of components.*
- 320 *The device of claim 310, wherein said guide is disengagable from said track.*
- 321 *A device for the working of fluids defined by an exterior surface, said device including substantially within said surface a structure, a cylinder assembly, a component reciprocable within said assembly and filamentary material, said component having at least one external circumferential projection, said cylinder assembly having at least one internal circumferential depression in which said projection is positioned to reciprocate, in operation said projection and depression defining a pair of toroidal fluid working chambers of cyclically variable capacity, said structure located outside said cylinder assembly and within said exterior surface, said structure together with said assembly at least partly defining a volume for passage of fluids to or from said working chambers, said volume containing said filamentary material and at least partly surrounding portion of said cylinder assembly.*

- 322 *The device of claim 321, including a casing, wherein said exterior surface is substantially that of said casing.*

- 323 *The device of claim 321, including means between said assembly and said component so as to cause said component to rotate relative to said assembly while reciprocating in said assembly.*

- 324 *The device of claim 321, wherein at least one of said cylinder assembly and said component is at least partly composed of ceramic material.*

- 325 *The device of claim 321, including at least one fastener, wherein at least one of said component and said cylinder assembly includes a multiplicity of elements held in assembled condition by said at least one fastener loaded under tension.*

- 326 *Cancelled*

- 327 *The device of claim 321, wherein said assembly comprises at least one pair of substantially identical components arranged in mirror image about one another.*

- 328 *The device of claim 321, wherein said component defines a passage for fluids worked by said device.*

- 329 *The device of claim 321, including cylinder assembly surfaces and component surfaces at least partly defining said working chambers, at least one of said surfaces having at least one relatively small deliberately manufactured depression, said depression wholly fillable by fluids worked by said device.*

- 330 *The device of claim 321, wherein said filamentary material includes substance having catalytic effect to hasten chemical reaction in said working fluid.*

- 331 *The device of claim 321, wherein said structure is at least partly composed of thermally insulating material.*

- 332 *The device of claim 321, wherein said device is a reciprocating internal combustion engine and said working chambers are combustion chambers, said engine having a charge gas*

supply system, a fuel delivery apparatus and an emission control system for hot exhaust gas emitted from said engine when operative.

- 333 *The device of claim 322, including means to mount said cylinder assembly in said casing to enable said cylinder assembly to rotate while said component is reciprocating in said cylinder assembly.*
- 334 *The device of claim 322, wherein said casing is at least partly of thermally insulating material.*
- 335 *The device of claim 323, wherein said means comprise a guide and an endless track, said guide movable in said endless track, said track having a multiple wave form configuration.*
- 336 *The device of claim 323, wherein said means comprise said component and said cylinder assembly define complementary surfaces at least partly of endless wave-like configuration.*
- 337 *The device of claim 323, including a rotatable shaft and a load transfer mechanism between said shaft and said rotatable and reciprocable component, wherein said mechanism comprises a hollow shaft with interior splines slidable on a shaft with external splines.*
- 338 *The device of claim 324, including at least one electrical circuit within said ceramic material.*
- 339 *The device of claim 325, wherein said fastener is of tubular form.*
- 340 *Cancelled*
- 341 *The device of claim 327, including at least one port located in said cylinder assembly for passage of fluid to or from said working chambers, wherein said port is positioned between said pair of components.*
- 342 *The device of claim 328, including filamentary material contained in said passage, wherein said filamentary material includes substance having catalytic effect to hasten chemical reaction in said working fluid.*
- 343 *The device of claim 335, wherein said guide is disengagable from said track during operation*

of said device.

- 344 *The device of any of claims 198, 208, 221, 231, 257, 277, 286, 297, 308, 321, 332 or 349, including a crankshaft and a connecting element for transfer of loads associated with said working chambers, said element mechanically linking said component to said crankshaft.*

- 345 *The device of any of claims 344, wherein in normal operation said loads are substantially tensile, said element transferring said loads to or from said crankshaft primarily by a pulling action rather than a pushing action.*

- 346 *The device of any of claims 208, 231, 257, 286, 308 or 349, including a first space for transfer of fluid to at least one said working chamber, at least one additional space for transfer of fluid from said working chamber, wherein at least one of said spaces contains filamentary material, said filamentary material including at least some substance having catalytic effect to hasten chemical reaction in said fluid.*

- 347 *The device of any of claims 198, 200, 201, 279, 280, 297, 309, 323 or 324, wherein said device is an internal combustion engine and at least one said fluid working chamber functions as a combustion chamber, said engine having a charge gas supply system, a fuel delivery apparatus and an emission control system for hot exhaust gas emitted from said engine when operative, said engine having no purposely designed means for transferring heat from said combustion chamber, such means including fluid circulating in a jacket adjacent to said assembly or cooling fins radiating from said assembly.*

- 348 *The device of any of claims 347, wherein said device is part of a compound engine including a turbine engine stage, in operation said hot exhaust gas being used to at least partly power said turbine engine stage.*

- 349 *A device for processing fluids, said device substantially defined by a casing having an exterior surface and thermal insulation, said casing at least partly supporting and enclosing at least one cylinder assembly including a cylinder and at least one cylinder head, said assembly containing a component reciprocable therein to define at least one working chamber of cyclically varying capacity located between said component said cylinder and said cylinder head, wherein said device is an un-cooled reciprocating internal combustion engine and said working chamber functions as a combustion chamber, said engine having a*

charge gas supply system, a fuel delivery apparatus and an emission control system for hot exhaust gas emitted from said engine when operative, said engine having no purposely designed means for transferring heat from said assembly nor any circulating liquid lubrication between said component and said cylinder.

350 *The device of claim 349, wherein at least one of said cylinder, said cylinder head and said component is substantially of ceramic material.*

351 *The device of claim 350, including at least one electrical circuit within said ceramic material.*

352 *Deleted*

353 *The device of claim 349, including at least one fastener, wherein at least one of said component and said cylinder assembly includes a multiplicity of elements held in assembled condition by said fastener loaded under tension.*

354 *Deleted*

355 *The device of claim 349, including cylinder assembly surfaces and component surfaces at least partly defining said working chambers, at least one of said surfaces having at least one relatively small deliberately manufactured depression, said depression wholly fillable by fluids worked by said device.*

356 *The device of claim 349, including structure located substantially within said surface and outside and proximate to said cylinder assembly, said structure at least partly defining at least one volume for passage of fluids to or from said working chamber, said volume being adjacent to and at least partly surrounding portion of said cylinder assembly.*

357 *The device of claim 349, wherein said device is part of a compound engine including a turbine engine stage, in operation said hot exhaust gas being used to at least partly power said turbine engine stage.*

358 *The device of claim 208, wherein said fuel delivery apparatus includes at least one injector assembly for delivery of at least two distinct fluids independently of one another.*

- 359 *The device of claim 231, wherein said fuel delivery apparatus includes at least one injector assembly for delivery of at least two distinct fluids independently of one another.*
- 360 *The device of claim 257, wherein said fuel delivery apparatus includes at least one injector assembly for delivery of at least two distinct fluids independently of one another.*
- 361 *The device of claim 286, wherein said fuel delivery apparatus includes at least one injector assembly for delivery of at least two distinct fluids independently of one another.*
- 362 *The device of claim 308, wherein said fuel delivery apparatus includes at least one injector assembly for delivery of at least two distinct fluids independently of one another.*
- 363 *The device of claim 332, wherein said fuel delivery apparatus includes at least one injector assembly for delivery of at least two distinct fluids independently of one another.*
- 364 *The device of claim 349, wherein said fuel delivery apparatus includes at least one injector assembly for delivery of at least two distinct fluids independently of one another.*
- 365 *Cancelled*
- 366 *Cancelled*
- 367 *The device of claim 208, wherein said emission control system includes at least one valve for restricting flow of said exhaust gas during selected operating periods of said reciprocating internal combustion engine.*
- 368 *The device of claim 231, wherein said emission control system includes at least one valve for restricting flow of said exhaust gas during selected operating periods of said reciprocating internal combustion engine.*
- 369 *The device of claim 257, wherein said emission control system includes at least one valve for restricting flow of said exhaust gas during selected operating periods of said reciprocating internal combustion engine.*
- 370 *Cancelled*

- 371 *The device of claim 286, wherein said emission control system includes at least one valve for restricting flow of said exhaust gas during selected operating periods of said reciprocating internal combustion engine.*
- 372 *The device of claim 308, wherein said emission control system includes at least one valve for restricting flow of said exhaust gas during selected operating periods of said reciprocating internal combustion engine.*
- 373 *Cancelled*
- 374 *The device of claim 332, wherein said emission control system includes at least one valve for restricting flow of said exhaust gas during selected operating periods of said reciprocating internal combustion engine.*
- 375 *The device of claim 349, wherein said emission control system includes at least one valve for restricting flow of said exhaust gas during selected operating periods of said reciprocating internal combustion engine.*
- 376 *Cancelled*
- 377 *The device of claim 208, wherein said engine has no purposely designed means for transferring heat from said combustion chamber, such means including fluid circulating in a jacket adjacent to said assembly or cooling fins radiating from said assembly.*
- 378 *The device of claim 286, wherein said engine has no purposely designed means for transferring heat from said combustion chamber, such means including fluid circulating in a jacket adjacent to said assembly or cooling fins radiating from said assembly.*
- 379 *The device of claim 308, wherein said engine has no purposely designed means for transferring heat from said combustion chamber, such means including fluid circulating in a jacket adjacent to said assembly or cooling fins radiating from said assembly.*
- 380 *The device of claim 332, wherein said engine has no purposely designed means for transferring heat from said combustion chamber, such means including fluid circulating in a jacket adjacent to said assembly or cooling fins radiating from said assembly.*

- 381 *The device of claim 349, wherein said assembly comprises at least one pair of substantially identical components arranged in mirror image about one another.*
- 382 *The device of claim 349, wherein said component defines a passage for fluids worked by said device.*
- 383 *The device of claim 349, including means to mount said cylinder assembly in said casing to enable said cylinder assembly to rotate while said component is reciprocating in said cylinder assembly.*
- 384 *The device of claim 349, said cylinder assembly having two heads and said cylinder having at least one internal circumferential depression, said component having at least one external circumferential projection, said projection reciprocable in said depression to form two said chambers of toroidal configuration.*
- 385 *The device of claim 349, including means between said assembly and said component so as to cause said component to rotate relative to said assembly while reciprocating in said assembly.*
- 386 *The device of claim 385, wherein said means comprise a guide and an endless track, said guide movable in said endless track, said track having a multiple wave-form configuration.*
- 387 *The device of claim 385, wherein said means comprise said component and said cylinder assembly defining complementary surfaces at least partly of an endless wave-like configuration.*
- 388 *The device of claim 385, including a rotatable shaft and a load transfer mechanism between said shaft and said rotatable and reciprocable component, wherein said mechanism comprises a hollow shaft with interior splines slidable on a shaft with external splines.*
- 389 *The device of claim 385, including a rotatable shaft and a load transfer mechanism between said shaft and said component, wherein said mechanism includes a bellows device.*
- 390 *The device of claim 385, including a rotatable shaft and a load transfer mechanism between said shaft and said component, wherein said mechanism includes at least one hinged element.*

- 391 *The device of claim 385, including a rotatable shaft and a load transfer mechanism between said shaft and said component, wherein said mechanism includes at least one pair of substantially parallel flanges separated by at least one roller, the flanges in operation moving laterally relatively to one another.*
- 392 *The device of claim 349, wherein said device is part of a compound engine including a steam engine stage, in operation said hot exhaust gas being used to at least partly power said steam engine stage.*
- 393 *The device of claim 349, wherein said device is part of a compound engine including a Stirling engine stage, in operation said hot exhaust gas being used to at least partly power said Stirling engine stage.*
- 394 *The device of claim 223, including a rotatable shaft and a load transfer mechanism between said shaft and said component, wherein said mechanism includes at least one pair of substantially parallel flanges separated by at least one roller, the flanges in operation moving laterally relatively to one another.*
- 395 *The device of claim 279, including a rotatable shaft and a load transfer mechanism between said shaft and said component, wherein said mechanism includes at least one pair of substantially parallel flanges separated by at least one roller, the flanges in operation moving laterally relatively to one another.*
- 396 *The device of claim 323, including a rotatable shaft and a load transfer mechanism between said shaft and said component, wherein said mechanism includes at least one pair of substantially parallel flanges separated by at least one roller, the flanges in operation moving laterally relatively to one another.*

END OF CLAIMS